AMENDMENT UNDER 37 C.F.R. § 1.114(c)

U.S. Application No.: 10/766,843

Attorney Docket No.: Q79623

**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions and listings of claims in the

application:

**LISTING OF CLAIMS:** 

1. (Previously Presented): A method of managing quality of service in a mobile

radio network in which protocols for communication over terrestrial interfaces comprise a radio

network layer and a transport network layer and wherein quality of service management includes

quality of service management linked to the radio network layer and quality of service

management linked to the transport network layer, said method comprising:

a first network element signals to a second network element, by means of the radio

network layer signaling protocol, at least one parameter representative of transport quality of

service or of quality of service for the transport network layer, a second network element uses

said at least one parameter for transport quality of service management for uplink transmission

over an Iub interface between a controlling radio network controller and a Node B, or for uplink

transmission over an Iur interface between a serving radio network controller and a drift radio

network controller and/or downlink transmission over an Iub interface between a drift radio

network controller and a Node B.

2. (Original): A method according to claim 1, wherein said first network element is

a controlling radio network controller.

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3. (Original): A method according to claim 2, wherein said second network element

is a Node B or a base station.

4. (Previously Presented): A method according to either claim 2, wherein said radio

network layer signaling protocol is a Node B Application Part protocol applicable to the Iub

interface between the controlling radio network controller and the Node B.

5. (canceled).

6. (Original): A method according to claim 1, wherein said first network element is

a serving radio network controller.

7. (Original): A method according to claim 6, wherein said second network element

is a drift radio network controller.

8. (Previously Presented): A method according to claim 6, wherein said radio

network layer signaling protocol is a Radio Network Subsystem Application Part signaling

protocol applicable to the Iur interface between the serving radio network controller and the drift

radio network controller.

9. (canceled).

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10. (Previously Presented): A method according to claim 1, wherein said at least one parameter representative of transport quality of service is a specific parameter intended to indicate a transport quality of service level.

- 11. (Previously Presented): A method according to claim 1, wherein said at least one parameter representative of transport quality of service is at least one radio access bearer parameter.
- 12. (Previously Presented): A method according to claim 11, wherein said at least one radio access bearer parameter is the transfer delay.
- 13. (Previously Presented): A method according to claim 11, wherein said at least one radio access bearer parameter is the traffic handling priority.
- 14. (Previously Presented): A method according to claim 11, wherein said at least one radio access bearer parameter is the traffic class.
- 15. (Previously Presented): A method according to claim 11, wherein said at least one radio access bearer parameter is copied or translated from the RANAP protocol to the NBAP protocol, or from the RANAP protocol to the RNSAP protocol.

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16. (Previously Presented): A method according to claim 1, wherein said at least one parameter representative of transport quality of service is at least one parameter associated with a transport quality of service level or at least one radio access bearer parameter.

- 17. (Previously Presented): A method according to claim 16, wherein said at least one parameter associated with a transport quality of service level or at least one radio access bearer parameter is a time adjustment parameter, the lowest values of said parameter being assigned to connections having higher transfer delay and/or traffic handling priority constraints and the higher values of said parameter being assigned to connections having higher transfer delay and/or traffic handling priority constraints.
- 18. (Previously Presented): A method according to claim 17, wherein said time adjustment parameter is the time of arrival window start parameter.
- 19. (Previously Presented): A method according to claim 16, wherein said at least one parameter associated with a level of transport quality of service or at least one radio access bearer parameter includes at least one parameter representative of the number of dedicated channels allocated to a connection, a high number of dedicated channels being allocated to connections having high transfer delay and/or traffic handling priority constraints and a lower

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number of dedicated channels being allocated to connections having lower transfer delay and/or traffic handling priority constraints.

20. (currently amended): A radio network controller CRNC comprising:

control means for controlling a Node B; and

data signalling means for signalling to a-the Node B in accordance with a signalling protocol of a radio network layer corresponding to the NBAP protocol applicable to the Iub interface between the radio network controller CRNC and Node B at least one parameter representing the quality of service for the transport network layer, for uplink transmission over the Iub interface between the eontrolling radio network controller CRNC and the Node B.

- 21. (currently amended): The radio network controller <u>CRNC</u> according to claim 20, further comprising means for signalling said wherein said at least one parameter is signaled to the Node B in a "Radio link set-up request" <u>Radio Link Setup Request</u> message.
- 22. (currently amended): The radio network controller <u>CRNC</u> according to claim 20, wherein said at least one parameter is a specific parameter intended to indicate a transport QoS level.
  - 23. (currently amended): A radio network controller SRNC comprising: control means for controlling a Node B; and

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signalling means for signalling to a radio network controller DRNC by means of a signalling protocol of a radio network layer corresponding to the RNSAP applicable to the Iur interface between radio network controller SRNC and radio network controller DRNC at least one parameter representing the quality of service for the transport network layer, for uplink transmission over the Iur interface between the serving-radio network controller SRNC and the drift-radio network controller DRNC and downlink transmission over an Iub interface between the drift-radio network controller DRNC and a Node B.

- 24. (currently amended): The radio network controller <u>SRNC</u> according to claim 23, further comprising means for signalling wherein said at least one parameter is signaled to the <u>Node B</u>, through the radio network controller <u>DRNC</u> in a "Radio link set-up request" <u>Radio Link</u> Setup Request message.
- 25. (currently amended): [[A]]The radio network controller <u>SRNC</u> according to claim 23, wherein said at least one parameter is a specific parameter intended to indicate a transport QoS level.
- 26. (currently amended): [[A]]<u>The</u> radio network controller <u>SRNC</u> according to claim 24, wherein said at least one parameter is a specific parameter intended to indicate a transport QoS level.

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27. (Previously Presented): A radio network controller DRNC comprising:

means for receiving from a radio network controller SRNC by means of a signalling protocol of a radio network layer corresponding to the RNSAP protocol applicable to the Iur interface between radio network controller SRNC and radio network controller DRNC at least one parameter representing the quality of service for the transport network layer,

means for using said at least one parameter for transport quality of service management for the transmission in the uplink direction over the Iur interface between radio network controller SRNC and radio network controller DRNC and in the downlink direction over the Iub interface between radio network controller DRNC and Node B.

- 28. (currently amended): The radio network controller according to claim 27, further comprising means for receiving said at least one parameter in a "Radio link set-up request Radio Link Setup Request message[["]].
- 29. (Previously Presented): The radio network controller according to claim 27, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.
- 30. (Previously Presented): The radio network controller according to claim 28, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.

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31. (Previously Presented): A Node B comprising means for receiving from a radio network controller CRNC in accordance with a signalling protocol of a radio network layer corresponding to the NBAP protocol applicable to the Iub interface between radio network controller CRNC and Node B at least one parameter representing the quality of service for the transport network layer and means for using said at least one parameter for managing the transport quality of service for transmission in the uplink direction over the Iub interface between the radio network controller CRNC and Node B.

- 32. (currently amended): The Node B according to claim 31, including means for receiving said at least one parameter in a "Radio link set-up request" Radio Link Setup Request message.
- 33. (Previously Presented): The Node B according to claim 31, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.
- 34. (Previously Presented): The Node B according to claim 32, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.